

## The TESSY Unit Test Automation Tool Adds Integration for eSOL's eBinder Embedded Software Development Environment

**Simplifies Coordination of Debug and Test Processes when Developing Functional Safety Applications**

Karlsruhe, Germany and Tokyo, Japan. May 8, 2017 – Hitex GmbH, a leading provider of software solutions for testing of embedded software, and eSOL, a leading developer of real-time embedded software solutions, today announced that the TESSY unit test automation tool for embedded software now supports eSOL's eBinder embedded software development environment as the build and execution environment for test applications. This integration enables both users to coordinate debug and test processes during application development in automotive, industrial, medical, and other fields especially where compliance to functional safety standards is required. eSOL subsidiary eSOL TRINITY Co., Ltd. is the Japan agent for TESSY.

eBinder and TESSY being used together will be demonstrated during the Embedded Systems Expo & Conference (ESEC) in Tokyo, Japan, May 10-12, 2017 at eSOL Booth # West 10-1 at Tokyo Big Sight.

TESSY is a unit test automation tool that allows using the target hardware, an instruction set simulator, and GNU environment running on Windows® as a test execution environment. Along with unit testing of functions/methods written in C/C++, it provides features for integration testing, various forms of code coverage measurement, and traceability between requirements and test cases. Bundled with TESSY is Classification Tree Editor (CTE), a test case specification tool that uses the Classification Tree Method (CTM). TESSY is developed by Razorcat, based in Berlin, Germany and distributed by Hitex. eBinder, meanwhile, is a suite of development tools designed for real-time operating system (RTOS)-based system development. It provides an extensive range of development tools that cover all the processes from build and debug through to unit and system verification. For ARM® cores, it also includes a compiler from ARM itself.

When used together, C/C++ source code developed using eBinder is analyzed on TESSY to extract the functions and auto-generate a project that includes a test driver. TESSY then utilizes the compiler in eBinder to build the project and to load and run the object code on the target hardware or simulator. When testing does not produce the desired results, the eBinder debug function can be used to track down the cause of the problem.

As both are compliant with various functional safety standards, TESSY and eBinder are an ideal combination for the development of functional safety software for automotive, industrial, medical, or other equipment. TESSY can be used for ISO 26262 (automotive), IEC 61508 (industrial equipment), DO-178B/C (avionics equipment), DIN EN 50128 (railways), ISO 13849 (machinery), and IEC 62304 (medical equipment) functional safety standards. eBinder is a highly reliable development environment that is developed using procedures that comply with the requirements of ISO 26262 and IEC 61508. eSOL is also seeking certification for its eBinder IDE.

In addition to the eBinder and TESSY tools, eSOL and eSOL TRINITY also offer the Continuous Integration (CI) Adoption Support Service launched by eSOL TRINITY, helping achieve genuine efficiency and quality improvements based on the adoption of CI in which building and testing are automated.

“Used together, eBinder and TESSY provide users with both quality assurance and more efficient debugging and testing,” said Joerg Stender, CEO of Hitex. “TESSY and eBinder support a variety of functional safety standards and, both here and overseas, share an extensive track record of use in especially mission-critical fields such as automotive, industrial, and aerospace. They make an ideal combination for embedded applications in the era of the IoT when requirements include high reliability and safety.”

“We have provided integration of test tools with eBinder, something that has been frequently requested in the past,” said Nobuyuki Ueyama, Executive Vice President of eSOL and President of eSOL TRINITY. “The embedded software development industry has recently been showing interest in continuous integration (CI) in which building and testing are automated. Use of eBinder and TESSY together means it is now easy to adopt CI. Drawing on the combined capabilities of the eSOL Group, which include the CI Adoption Support Service from eSOL TRINITY, we will continue providing total support for efficiency and quality improvement in embedded software development.”

## **About Hitex**

Hitex GmbH, based at Karlsruhe (Germany), was founded in 1976 as a systems house. Today, Hitex is focusing on a comprehensive product and service portfolio for software quality and functional safety in embedded applications. Hitex is not only offering professional tools, but also services such as consulting, training, test services or certification support.

Further information: [www.hitex.com/tessy](http://www.hitex.com/tessy)

## **About Razorcat**

Razorcat Development Tools GmbH, based in Berlin (Germany) was founded in 1997 as a spin-off of the Daimler software research laboratory in Berlin. Today, Razorcat concentrates on further developing its flagship product, the unit testing tool TESSY.

Further information: [www.razorcat.com](http://www.razorcat.com)

## **About eSOL**

Founded in 1975, eSOL is a leading developer of real-time embedded software solutions that seeks to create a rich IoT society using its innovative computer technologies. eSOL's software platform products and professional services, centered around its real-time operating system technology, are used worldwide in every field, starting with automotive systems, which conform to the most stringent quality standards, and including industrial equipment, satellites, and digital consumer electronics. In addition to the research and development of its own leading-edge products, and joint research with major manufacturers and universities, eSOL is actively engaged in AUTOSAR and Multi-Many-Core technology standardization activities. For more information, please visit <http://www.esol.com/>

## **About eSOL TRINITY**

eSOL TRINITY (TRINITY) is a premier solutions provider for the design and development of embedded software. TRINITY's comprehensive solution consists of consulting and professional services, tools, and fostering of engineering experts. With its rich experience in the automotive market and its wide range of expertise including model-based development (MBD), functional safety and static analysis, TRINITY contributes to improvement of internal software quality and reduction of

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development costs. TRINITY was established in 2015 as a wholly owned subsidiary of eSOL Co., Ltd., the leading provider of real-time embedded software solutions.

For more information about eSOL TRINITY, please see <http://www.esol-trinity.co.jp/> (Japanese only).